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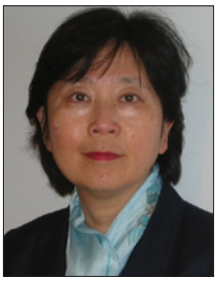

The Life-Course Approach to Health

In this issue, several authors present work on the life-course approach to health and disease. Also included herein are a number of studies about exposures in the perinatal period that have long-term effects on health.

Increasingly, the life-course approach is playing an important role in understanding population health and well-being. This perspective views health as the product of risk behaviors, protective factors, and environmental agents that we encounter throughout our entire lives and that have cumulative, additive, and even multiplicative impacts on specific outcomes. It thus provides a construct for interpreting how peoples' experiences in their early years influence their later health and functioning.

The life-course perspective is also relevant for examining and addressing health disparities between vulnerable and well-off populations. For example, compared with children born in the United States, immigrant children often experience very different sets of health and economic conditions throughout their development as infants, young children, and adolescents. Linguistic isolation, economic deprivation, lack of health insurance, and limited or no access to health care impair the growth and developmental trajectories of many immigrant children. On the other hand, these same children may experience a culturally supportive and enriching environment from an early age that may positively influence their later health and well-being, thus mitigating the negative influences on health that they experience.

Historically, British scientists have emphasized longitudinal studies with multidisciplinary input to uncover the effects of earlier life-course exposures on later health outcomes. Such well-designed studies have the potential to further our understanding of the health and well-being of vulnerable, minority, and immigrant populations. Indeed, a number of studies that focus on the longitudinal development of children and youths are currently in progress, including the Longitudinal Study of Australian Children, the Millennium Cohort Study in England, and the National Longitudinal Survey of Children and Youth in Canada.

Engaging in such studies requires cohesive national planning, vast amounts of resources, and substantial commitments to thoughtfully analyzing and disseminating collected data. It is frequently difficult for longitudinal studies that collect complex and detailed information to provide both a national probability sample and sufficient power for subgroup analysis. Indeed, analytic techniques and statistical software that can accommodate contextual data, multilevel modeling, and variance estimation of complex surveys have not been widely validated. Nevertheless, studies that follow participants from preconception through childhood, adolescence, and adulthood are essential despite such methodological challenges. The Early Childhood Longitudinal Study Kindergarten and Birth Cohorts, the National Longitudinal Study of Youth, the National Longitudinal Study of Adolescent Health, and the planned National Children's Study are examples of current US efforts.

Given the very broad applications of the life-course model, and the fact that most public health programs today are dedicated to remedying the damage preceded by earlier deprivations, an important and logical question to ask would be, What interventions can be instituted to slow the progression of earlier adverse effects and reverse any potential damage? By systematically pursuing the life-course paradigm, we could potentially reduce the heavy human and economic costs precipitated by health inequities. The knowledge gained from life-course studies could then be resolutely applied to health and other programs in different age, racial/ethnic, socioeconomic, and gender groups to relieve suffering and offer hope of living healthy and fulfilling lives. ■

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